



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,234	11/19/2001	William S. Nevin	NEVIN-0001	8116
21261 7590 09/06/2007 ROBERT PLATT BELL REGISTERED PATENT ATTORNEY P.O. BOX 310 AURORA, NY 13026-0310			EXAMINER COBANOGU, DILEK B	
			ART UNIT 3626	PAPER NUMBER
			MAIL DATE 09/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	09/988,234		NEVIN ET AL.	
	Examiner		Art Unit	
	Dilek B. Cobanoglu		3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9,11-19,21,22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9,11-19,21,22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/19/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/09/2007 entered.

2. Claims 1, 8, 14, 21 have been amended. Claims 7, 10, 20 and 23 had been canceled. Claims 1-6, 8-9, 11-19, 21-22 and 24-26 remain pending in this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 8-9, 11-19, 21-22 and 24-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Joao (U.S. Patent No. 6,283,761 B1) in view of Mohlenbrock et al. (hereinafter Mohlenbrock) (U.S. Patent No. 5,018,067).

A. Claim 14 has been amended now to recite a method of providing health care information comprising the steps of:

- i. defining a patient population (Joao; col. 13, lines 39-51, col. 14, lines 13-32);
- ii. generating patient interview data including at least one or more of patient history information and patient symptom information from an interview with a patient (Joao; col. 14, lines 13-32, col. 14, line 49 to col. 15, line 5, col. 16, lines 33-65, col. 22, lines 22-63, col. 25, lines 25-38, and col. 29, lines 28-35),
- iii. generating patient encounter data, including one or more of symptom information, treatment information, prescription information and diagnosis information from an encounter with a patient (Joao; col. 16, lines 33-65, col. 23, lines 48-60 and col. 24, lines 12-20),
- iv. combining and compressing patient interview data into a health summary record (Joao; col. 20, lines 20-26, col. 25, lines 25-53), and
- v. generating customized medical reports from the health summary record for a patient, an attending physician and an insurance provider using patient interview data and patient encounter data, each customized medical report being provided in a predetermined format for a corresponding one of the patient, the attending physician, and the insurance provider (Joao; col. 13, lines 39-51, col. 16, lines 38-65, col. 20, lines 20-26, col. 25, lines 25-53, line 63 to col. 26, line 6, figure 1).

Joao fails to expressly teach the standardized codes indicating at least one or more of patient symptoms, patient treatments and

patient condition. However, this feature is well known in the art, as evidenced by Mohlenbrock.

In particular, Mohlenbrock discloses standardized codes (ICD codes) indicating at least one or more of patient symptoms, patient treatments and patient condition (Mohlenbrock; col.5, lines 14-35, col. 9, lines 17-27).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Mohlenbrock with the motivation of extracting the hidden clinical information (Mohlenbrock; col.5, lines 17-19).

B. As per claim 15, Joao discloses the method of providing health care information of claim 14, further comprising the steps of: assigning a health risk score to each patient based upon the health summary record. (Joao; col. 17, lines 25-61 and col. 25, lines 40-53).

C. As per claim 16, Joao discloses the method of providing health care information of claim 15, further comprising the steps of: analyzing patient health summary records and assigning a patient to a disease management track and indicating the disease management track on the customized medical report generated for an attending physician. (Joao; col. 25, lines 40-62).

D. As per claim 17, Joao discloses the method of providing health care information of claim 16, wherein said disease management track comprises a medication recommendation program for the attending physician and the

customized medical report generated for the attending physician includes the medical recommendation program. (Joao; col. 17, lines 25-31 and col. 26, lines 20-38).

E. As per claim 18, Joao discloses the method of providing health care information of claim 17, wherein said disease management track comprises a treatment recommendation program for an attending physician and the customized medical report generated for the attending physician includes the treatment recommendation program. (Joao; col. 7, lines 7-15, col. 17, lines 25-31 and col. 26, lines 20-38).

F. As per claim 19, Joao discloses the method of providing health care information of claim 18, wherein said disease management track comprises an education program for a patient and the customized medical report comprises a customized medical report generated for a patient, including the education program. (Joao; col. 18, lines 50-58).

G. Claim 21 has been amended to now recite a method of providing health care information comprising the steps of:

- i. defining a patient population (Joao; col. 13, lines 39-51, col. 14, lines 13-32);
- ii. generating patient interview data including at least one or more of patient history information and patient symptom information from an interview with a patient (Joao; col. 14, lines 13-32, col. 14, line 49 to col.

15, line 5, col. 16, lines 33-65, col. 22, lines 22-63, col. 25, lines 25-38, and col. 29, lines 28-35);

- iii. generating patient encounter information data including one or more of symptom information, treatment information, prescription information and diagnosis information from an encounter with a patient (Joao; col. 16, lines 33-65, col. 23, lines 48-60 and col. 24, lines 12-20);
- iv. combining and compressing patient interview data into a health summary record (Joao; col. 20, lines 20-26, col. 25, lines 25-53) comprising standardized codes indicating at least one or more of patient symptoms, patient treatments, and patient condition, and,
- v. generating customized medical reports from the health summary record (Joao; col. 20, lines 20-26, col. 25, lines 25-53);
- vi. wherein said customized medical reports include patient non-compliance reports generated from patient data and insurance claim data to indicate whether a patient has performed a task associated with a treatment program (Joao; col. 6, lines 45-61, col. 16, lines 38-65, col. 27, lines 2-8 and col. 34, lines 15-29).

The obviousness of modifying the teaching of Joao to include standardized codes indicating at least one or more of patient symptoms, patient treatments, and patient condition (as taught by Mohlenbrock) is as addressed above in the rejection of claim 14 above and incorporated herein.

H. As per claim 22, Joao discloses the method of providing health care information of claim 14, wherein said customized medical reports comprise: patient temporary condition reports, indicating temporary medical conditions of a patient, and patient permanent condition reports, indicating permanent conditions of a patient. (Joao; col. 16, lines 38-65, col. 20, lines 20-26 and col. 25, lines 40-53).

I. As per claim 24, Joao discloses the method of providing health care information of claim 14, wherein said customized medical reports include doctor reports summarizing patient medical history and medical condition. (Joao; col. 25, line 40 to col. 26, line 6).

J. As per claim 25, Joao discloses the method of providing health care information of claim 14, wherein said customized medical reports include medical provider reports summarizing patient medical claim history and medical claim status (Joao; col. 6, lines 45-61, col. 25, line 63 to col. 26, line 6).

K. As per claim 26, Joao discloses the method of providing health care information of claim 14, further comprising the steps of:

- i. downloading customized medical reports to a personal digital assistant (Joao; col. 14, lines 49-58, col. 14, line 59 to col. 15, line 5 and col. 25, line 54 to col. 26, line 6);
- ii. uploading patient data entered by a physician into a personal digital assistant from the personal digital assistant (Joao; col. 5, lines 34-40, col. 14, lines 49- 58 and col. 25, line 54 to col. 26, line 6); and

- iii. integrating such data into health summary records (Joao; col. 3, lines 34-45).

L. Claim 1 has been amended now to recite a health care provider information system comprising:

- i. means for defining a patient population (Joao; col. 13, lines 39-51, col. 14, lines 13-32);
- ii. means for generating patient interview data including at least one or more of patient history information and patient symptom information (Joao; col. 14, lines 13-32, col. 14, line 49 to col. 15, line 5, col. 16, lines 33-65, col. 22, lines 22-63, col. 25, lines 25-38, and col. 29, lines 28-35);
- vi. means for generating patient encounter data, including one or more of symptom information, treatment information, prescription information and diagnosis information (Joao; col. 16, lines 33-65, col. 23, lines 48-60 and col. 24, lines 12-20);
- vii. means for combining and compressing patient interview data into a health summary record (Joao; col. 20, lines 20-26, col. 25, lines 25-53) comprising standardized codes indicating at least one or more of patient symptoms, patient treatments, and patient condition; and
- viii. means for generating customized medical reports from the health summary record for a patient, an attending physician and an insurance provider using patient interview data and patient encounter data, each customized medical report being provided in a predetermined format for a

corresponding one of the patient, the attending physician, and the insurance provider (Joao; col. 13, lines 39-51, col. 16, lines 38-65, col. 20, lines 20-26, col. 25, lines 25-53, line 63 to col. 26, line 6, figure 1).

Joao fails to expressly teach the standardized codes indicating at least one or more of patient symptoms, patient treatments and patient condition. However, this feature is well known in the art, as evidenced by Mohlenbrock.

In particular, Mohlenbrock discloses standardized codes (ICD codes) indicating at least one or more of patient symptoms, patient treatments and patient condition (Mohlenbrock; col.5, lines 14-35, col. 9, lines 17-27).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Mohlenbrock with the motivation of extracting the hidden clinical information (Mohlenbrock; col.5, lines 17-19).

M. As per claims 2-6, 8-9, 11-13, they are system claims, which repeat the same limitations of claims 15-19, 21-22 and 24-26, the corresponding method claims, as a collection of elements as opposed to a series of process steps. Since the combination of teachings of Joao and Mohlenbrock discloses the underlying process steps that constitute the methods of claims 15-19, 21-22 and 24-26, it is respectfully submitted that they provide the underlying structural elements that

perform the steps as well. As such, the limitations of claims 2-6, 8-9, 11-13 are rejected for the same reasons given below for claims 15-19, 21-22 and 24-26.

Response to Arguments

5. Applicant's arguments filed 03/07/2007 have been fully considered but they are not persuasive. Applicant's arguments will be addressed below in the order in which they appear.

A. In response, all of the limitations which Applicant disputes as missing in the applied references have been fully addressed by the Examiner as either being fully disclosed or obvious in view of the collective teachings of Joao and/or Mohlenbrock, based on the logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention, as detailed in the remarks and explanations given in the preceding sections of the present office Action, and incorporated herein. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

B. In addition, it is respectfully submitted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of

Art Unit: 3626

ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

C. In response to Applicant's argument about Mohlenbrock does not teach "generating a Health Summary Report"; Examiner respectfully submits that Joao teaches generating a health summary report in col. 20, lines 20-26, but Joao fails to teach "standardized codes" to indicate at least one of patient symptoms, treatments, and conditions, Mohlenbrock teaches "standardized codes in col.5, lines 14-35, col. 9, lines 17-27 and the motivation is extracting the hidden clinical information (Mohlenbrock; col.5, lines 17-19).

D. Applicant argues that references do not teach "generating customized medical report based upon a common health summary record" Examiner respectfully submits that Joao teaches a database (10H), which contains all of the information needed in order to perform all of the functions, services and operations performed by central processing computer 10 or the apparatus 100, and any of the data/information stored in the database 10H can be utilized an/or can appear in any of the reports, diagnosis reports, treatment reports, evaluation reports, provider reports, payer reports, patient reports col. 20, lines 20-26.

E. Applicant argues that Joao does not teach "a health risk score"; Examiner respectfully submits that the specification of this application describes the health risk score in paragraph 104 "...From that sorted data, a risk stratification score is assigned in step 730. This risk stratification score could be as simple as a three level (low/medium/high) score, or could be made more complex to include

specific disease risk levels or codes." Examiner would like to submit that Joao teaches "generating a diagnosis report, which include a single diagnosis and/or a list of possible diagnoses, along with their respective probabilities of occurrence and/or statistical information corresponding thereto, which may pertain to the patient's condition." In col. 25, lines 40-62. Joao teaches possible diagnoses along with their respective probabilities of occurrence, which are scores of risk levels.

F. Applicant argues that Joao does not teach "disease management track"; Examiner respectfully submits that according the specification of this application, paragraph 0062 "... In this process, each patient may be assigned a health risk "score" based upon the data from the previous steps (HRA, HSR, demographics, claim encounters). A member (patient) may be then assigned to a disease management track. In this manner, patients with a particular risk potential for a particular disease (e.g., diabetes, heart disease, cancer) may be "tracked" and preventative medicine practiced to prevent or delay the onset of such diseases.", and Joao teaches in col. 25, lines 40-62 that "the central processing computer will generate a diagnosis report, which include a single diagnosis and/or a list of possible diagnoses, along with their respective probabilities of occurrence and/or statistical information corresponding thereto, which may pertain to the patient's condition. At step 707, the central processing computer 10 will generate a treatment report, which will outline and/or prescribe treatment for the single diagnosis and/or for the list of possible diagnosis.

G. In response to Applicant's argument about Joao does not teach "creating custom medical reports for the physician and the patient"; Examiner respectfully submits that Joao teaches "...the central processing computer 10 can provide services for any of the other computers and/or computer systems described herein as being associated with any of the individuals, patients, healthcare providers, insurers, payers, brokers, agents, and/or intermediaries..." in col. 13, lines 39-51, and "...any of the data and/or information which is stored in database 10H can be utilized and/or can appear in any of the reports..." in col. 20, lines 20-26 and Figure 1.

H. In response to Applicant's argument about Joao does not teach "a treatment recommendation program"; Examiner respectfully submits that Joao teaches "...the diagnosis report and/or treatment reports can be accompanied by health and/or wellness information which can include suggestions for health and/or wellness foods, goods, products, and/or services." in col. 26, lines 20-38.

I. In response to Applicant's argument about Joao does not teach "generating custom reports for both doctors and patients based upon the Health Summary Record"; Examiner respectfully submits that Joao teaches "...the central processing computer 10 can provide services for any of the other computers and/or computer systems described herein as being associated with any of the individuals, patients, healthcare providers, insurers, payers, brokers, agents, and/or intermediaries..." in col. 13, lines 39-51, and "...any of the data and/or

information which is stored in database 10H can be utilized and/or can appear in any of the reports..." in col. 20, lines 20-26 and Figure 1.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not used prior art teach Patient monitor and support system 5,558,638, Portable medical questionnaire presentation device 5,572,421, Medical history documentation system and method 5,704,371 A, System and method of generating prognosis and therapy reports for coronary health management 5,724,580 A, System and method for managing patient medical records 5,772,585 A, Systems, methods and computer program products for monitoring, diagnosing and treating medical conditions of remotely located patients 6,024,699 A, System and method for managing patient care 2002/0169636.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dilek B. Cobanoglu whose telephone number is 571-272-8295. The examiner can normally be reached on 8-4:30.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 3626

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DBC

DBC

Art Unit 3626

08/27/2007

Robert Morgan

ROBERT W. MORGAN
PRIMARY EXAMINER
TECHNOLOGY CENTER 3600